

HP StorageWorks

IBM AIX connectivity 3.0G for the EVA3000/EVA5000 Enterprise Virtual Array release notes

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About this document

This document includes the following topics:

- Release notes information
- Intended audience

Release notes information

These release notes include the following topics:

- New features
- EVA storage system
- EVA compatability
- VCS firmware upgrade
- Storage System Scripting Utility for EVA
- Avoiding problem situations
- Operating constraints
- Host considerations

Intended audience

This document is intended to assist customers who purchased the StorageWorks Enterprise Virtual Array (EVA) to run on the IBM AIX operating system.

This document is also intended for use by HP customer service personnel responsible for installing and maintaining devices connected to the EVA.

New features

The following are major enhancements included in this release:

- Support for Virtual Controller Software (VCS) 3.025
- Support for Storage System Scripting Utility (SSSU) 3.2, build 7

EVA storage system

This document contains the most recent product information about operating the EVA on an IBM AIX system.

EVA documentation

A complete library of EVA and related documentation is available at the following web sites.

<http://www.hp.com/go/eva5000>

<http://www.hp.com/go/eva3000>

Product support information

The latest product support release information and downloads for storage products are available at the following web site:

<http://h18006.www1.hp.com/storage/index.html>

Supported configurations

Supported configurations are described in the *Enterprise Virtual Array QuickSpecs*, available at the following web sites:

<http://h18006.www1.hp.com/products/storageworks/eva3000/specifications.html>

<http://h18006.www1.hp.com/products/storageworks/eva5000/specifications.html>

The *HP StorageWorks SAN design reference guide* is a detailed guide for SAN configurations and is available at the following web site.

<http://h18004.www1.hp.com/products/storageworks/san/documentation.html>.

EVA compatibility

Table 1 lists the operating system's specifications. Refer to Secure Path documentation for the multiple path driver versions.



NOTE:

Table 1 contains current minimum-level operating system specifications at the time of the EVA 3.025 release. Some component versions may change due to revision. For the latest information, go to <http://h18006.www1.hp.com/storage/index.html>.

Table 1 Operating system specifications

IBM AIX version	Clustering	FCA (HBA)	Adapter firmware version (minimum)	Adapter driver version (minimum)
4.3.3	HACMP 4.4.1	A7539A	3.2.10	1.5.25.3 1.5.26.0 (Single-path driver only)
5.1	HACMP 4.4.1, 4.5, 5.1			
5.2	HACMP 4.5, 5.1			

Switch support

This release supports the Fibre Channel switches and firmware versions listed in the *HP StorageWorks SAN design reference guide* which can be downloaded from the following web site: <http://h18000.www1.hp.com/products/storageworks/san/documentation.html>.



NOTE:

HP recommends that you do not mix switch firmware versions in your SAN. It is considered a best practice to uniformly upgrade all switches in the SAN.

Multiple-path support

IBM AIX with EVA storage requires the installation of StorageWorks Secure Path on each host system to achieve high-availability multiple path capability.

Supported IBM servers

Table 2 lists the EVA compatible IBM AIX server models.

Table 2 IBM AIX supported servers

Server	Number
RS/6000 (PCI and PCI-X based servers only)	43P, 44P, F50, F80, H50, H70, H80, M80, S70, S7A, S80, S85, 170, 270
SP9076 model P-series	P610, P615, P620, P630*, P640, P650*, P655, P660, P670, P680, P690*

*The SWIA1 and A7539A adapter driver does not support extended error handling.

Operating constraints

You can find operating constraints specific to the EVA and Command View EVA in their respective release notes.

Failover/failback

Failback preference settings for the HSV controllers are specific to the operating system. Refer to the HP StorageWorks Enterprise Virtual Array release notes for details.

Set all virtual disks for use by the IBM AIX host to `No Preference` on the Virtual Disk Properties page in Command View EVA.

Storage System Scripting Utility for EVA

The Storage System Scripting Utility (SSSU) communicates directly with the Command View EVA. Refer to the *Command View EVA release notes* prior to using the SSSU.

Avoiding problem situations

The following sections describe problems that may arise and their solutions.

Known problems

You can find problems specific to the EVA and Command View EVA in their respective release notes.

Secure Path version

The EVA with VCS 3.025 requires the latest version of Secure Path for your operating system. The current version of Secure Path for your operating system can be found at the following web page.

<http://h18006.www1.hp.com/products/storageworks/enterprise/specifications.html>

Codeload usage

When a maximally configured system is running at maximum load, codeload functionality is not effective due to Secure Path timing constraints. The system may time-out before codeload is complete. Therefore, you should perform VCS upgrades at an off-peak time.

Host considerations

This section contains information and important reminders about the host servers.

PCI hot swapping of FCAs not supported

Hot swapping is defined as replacing one FCA with an identical FCA in the same PCI slot while the system is running. This function is not supported on pSeries systems that support hot swapping, because it hangs the server. To replace an FCA, you must first shut down the server.

PCI hot addition of FCAs not supported

You cannot add a PCI FCA to an empty PCI slot while the system is running because the hot addition of the FCA fails. The server must be shut down in order to add an FCA.

FCA driver does not support Extended Error Handling (EEH)

EEH is a mechanism built into the pSeries servers that allow the servers to isolate a faulty FCA and shut it down. The IBM connectivity does not support EEH.

devices.scsi.disk.rte fileset

Do not use version 5.1.0.51 or 5.1.0.52 of the `devices.scsi.disk.rte` fileset because this will cause a loss of connectivity for all child devices of SWIA1-PD or A7539A FC HBAs.

VCS firmware upgrades

When upgrading the EVA VCS firmware, both controllers become inoperative. Under normal operating conditions, Secure Path for AIX fails when both controllers are inoperative. However, this release provides a utility to pause I/O without causing data corruption. The `pause_io` utility is located in the `/usr/hp_hsv110` directory or the `/usr/hp_hsv100` directory.

To upgrade the VCS firmware:

1. Change to the `/usr/hp_hsv110` or `/usr/hp_hsv100` directory.
2. Enter the `/pause_io` command.
3. Enter `y` when prompted.
4. Update the VCS firmware as directed in the VCS documentation.

This will take about 10 minutes.

5. after the EVA controllers are back online as indicated on the Command View EVA display, press **Enter** to restart the I/O.